Growth parameters and mortality rates of Whipfin silver-biddy (Gerres filamentosus) and Longtail silver-biddy (Gerres longirostris) from creeks of Hara protected area in Jask, Iran

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Abstract

Population parameters of Whipfin silver-biddy (Gerres filamentosus) and Longtail silver-biddy (Gerres longirostris) were studied from January to December 2006 in three creeks (Markazi, Khalasi and Gabrik) of Hara protected area in Jask, Oman Sea. All fishes were sampled by boat trawl and beach seine. Growth parameters were determined using the monthly length–frequency parameters. The Mean total length was calculated at 6.2 and 5.4cm for Whipfin silver-biddy and Longtail silver-biddy. The values of \( L_\infty \) and \( K \) for Whipfin silver-biddy were 16.8cm and 0.99 \( \text{yr}^{-1} \) and for Longtail silver-biddy, these were 15cm and 0.77 \( \text{yr}^{-1} \), respectively. The value of \( t_0 \) was calculated at -0.12 year for both species. The longevity was estimated to be 3 years for Whipfin silver-biddy and 3.8 years for Longtail silver-biddy. The length-weight relationship were determined as \( W= 0.0088 \ L^{3.21} \) and \( W= 0.0087 \ L^{3.18} \) for Whipfin silver-biddy and Longtail silver-biddy, respectively. Results showed the fish were in their juvenile stage which emphasized the supporting roles of creeks for Gerridae as nursery ground.

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